

RAW SEQUENCE LISTING

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Application Serial Number: 09/478,567
Source: IFW0
Date Processed by STIC: 06-15-2005

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/478,567

DATE: 06/15/2005

TIME: 15:09:28

Input Set : N:\Crf3\RULE60\09478567.raw.txt
 Output Set: N:\CRF4\06152005\I478567.raw

1 <110> APPLICANT: Rao, Gururaj A.
 2 Major Sleister, Heidi
 3 <120> TITLE OF INVENTION: Compositions and Methods for Altering Amino Acid
 4 Content of Proteins
 5 <130> FILE REFERENCE: 5718-16
 6 <140> CURRENT APPLICATION NUMBER: US/09/478,567
 7 <141> CURRENT FILING DATE: 2000-01-06
 8 <150> PRIOR APPLICATION NUMBER: US/08/988,015
 9 <151> PRIOR FILING DATE: 1997-12-10
 10 <160> NUMBER OF SEQ ID NOS: 11
 11 <170> SOFTWARE: PatentIn Ver. 2.0
 13 <210> SEQ ID NO: 1
 14 <211> LENGTH: 218
 15 <212> TYPE: PRT
 16 <213> ORGANISM: Glycine max
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 22 Thr Lys Asp Tyr Ile Asn Gly Glu Gln Phe Arg Ser Asp Ser Lys Thr
 23 35 40 45
 24 Val Asn Gln Gln Ala Phe Phe Tyr Ala Ser Glu Arg Glu Val His His
 25 50 55 60
 26 Asn Asp Ile Phe Ile Phe Gly Ile Asp Asn Thr Val Leu Ser Asn Ile
 27 65 70 75 80
 28 Pro Tyr Tyr Glu Lys His Gly Tyr Gly Val Glu Glu Phe Asn Glu Thr
 29 85 90 95
 30 Leu Tyr Asp Glu Trp Val Asn Lys Gly Asp Ala Pro Ala Leu Pro Glu
 31 100 105 110
 32 Thr Leu Lys Asn Tyr Asn Lys Leu Leu Ser Leu Gly Phe Lys Ile Val
 33 115 120 125
 34 Phe Leu Ser Gly Arg Tyr Leu Asp Lys Met Ala Val Thr Glu Ala Asn
 35 130 135 140
 36 Leu Lys Lys Ala Gly Phe His Thr Trp Glu Gln Leu Ile Leu Lys Asp
 37 145 150 155 160
 38 Pro His Leu Ile Thr Pro Asn Ala Leu Ser Tyr Lys Ser Ala Met Arg
 39 165 170 175
 40 Glu Asn Leu Leu Arg Gln Gly Tyr Arg Ile Val Gly Ile Ile Gly Asp
 41 180 185 190
 42 Gln Trp Ser Asp Leu Leu Gly Asp His Arg Gly Glu Ser Arg Thr Phe
 43 195 200 205
 44 Lys Leu Pro Asn Pro Met Tyr Tyr Ile Glu

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49 <212> TYPE: PRT
50 <213> ORGANISM: Glycine max
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55         20          25          30
56     Thr Lys Glu Tyr Ile His Gly Glu Gln Tyr Arg Ser Asp Ser Lys Thr
57         35          40          45
58     Val Asn Gln Gln Ala Tyr Phe Tyr Ala Arg Asp Leu Glu Val His Pro
59         50          55          60
60     Lys Asp Thr Phe Val Phe Ser Ile Asp Asn Thr Val Leu Ser Asn Ile
61         65          70          75          80
62     Pro Tyr Tyr Lys Lys His Gly Tyr Gly Val Glu Lys Phe Asn Ser Thr
63         85          90          95
64     Leu Tyr Asp Glu Trp Val Asn Lys Gly Asn Ala Pro Ser Leu Pro Glu
65         100         105         110
66     Thr Leu Lys Asn Tyr Asn Lys Leu Val Ser Leu Gly Phe Lys Ile Ile
67         115         120         125
68     Phe Leu Ser Gly Arg Thr Leu Asp Lys Gln Ala Val Thr Glu Ala Asn
69         130         135         140
70     Leu Lys Lys Ala Gly Tyr His Thr Trp Glu Lys Leu Ile Leu Lys Asp
71         145         150         155         160
72     Pro Gln Pro Ser Thr Pro Asn Ala Val Ser Tyr Lys Thr Ala Ala Arg
73         165         170         175
74     Glu Lys Leu Ile Arg Gln Gly Tyr Asn Ile Val Gly Ile Ile Gly Asp
75         180         185         190
76     Gln Trp Ser Asp Leu Leu Gly Gly His Arg Gly Glu Ser Arg Thr Phe
77         195         200         205
78     Lys Leu Pro Asn Pro Leu Tyr Tyr Ile Gln
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89         20          25          30
90     Met Val Gly Pro Gly Tyr Lys Met Glu Ile Asp Arg Val Ser Asp Glu
91         35          40          45
92     Ala Gly Glu Tyr Ala Lys Ser Val Asp Leu Gly Asp Asp Gly Arg Asp
93         50          55          60
94     Val Trp Ile Phe Asp Val Asp Glu Thr Leu Leu Ser Asn Leu Pro Tyr
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96 Tyr Ser Asp His Arg Tyr Gly Leu Glu Val Phe Asp Asp Val Glu Phe
 97 85 90 95
 98 Asp Lys Trp Val Glu Asn Gly Thr Ala Pro Ala Leu Gly Ser Ser Leu
 99 100 105 110
 100 Lys Leu Tyr Gln Glu Val Leu Lys Leu Gly Phe Lys Val Phe Leu Leu
 101 115 120 125
 102 Thr Gly Arg Ser Glu Arg His Arg Ser Val Thr Val Glu Asn Leu Met
 103 130 135 140
 104 Asn Ala Gly Phe His Asp Trp His Lys Leu Ile Leu Arg Gly Ser Asp
 105 145 150 155 160
 106 His Gly Lys Thr Ala Thr Thr Tyr Lys Ser Glu Arg Arg Asn Ala Met
 107 165 170 175
 108 Val Glu Glu Gly Phe Arg Ile Val Gly Asn Ser Gly Asp Gln Trp Ser
 109 180 185 190
 110 Asp Leu Leu Gly Ser Ser Met Ser Tyr Arg Ser Phe Lys Leu Pro Asn
 111 195 200 205
 112 Pro Met Tyr Tyr Ile Leu
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 118 <213> ORGANISM: Phaseolus vulgaris
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 124 Thr Ala Asn Tyr Ile Glu Gly Gly Gln Tyr Arg Ser Asp Ser Lys Thr
 125 35 40 45
 126 Val Asn Gln Gln Ile Tyr Phe Phe Ala Arg Asp Arg His Val His Glu
 127 50 55 60
 128 Asn Asp Val Ile Leu Phe Asn Ile Asp Gly Thr Ala Leu Ser Asn Ile
 129 65 70 75 80
 130 Pro Tyr Tyr Ser Gln His Gly Tyr Gly Ser Glu Lys Phe Asp Ser Glu
 131 85 90 95
 132 Arg Tyr Asp Glu Glu Phe Val Asn Lys Gly Glu Ala Pro Ala Leu Pro
 133 100 105 110
 134 Glu Thr Leu Lys Asn Tyr Asn Lys Leu Val Ser Leu Gly Tyr Lys Ile
 135 115 120 125
 136 Ile Phe Leu Ser Gly Arg Leu Lys Asp Lys Arg Ala Val Thr Glu Ala
 137 130 135 140
 138 Asn Leu Lys Lys Ala Gly Tyr Asn Thr Trp Glu Lys Leu Ile Leu Lys
 139 145 150 155 160
 140 Asp Pro Ser Asn Ser Ala Glu Asn Val Val Tyr Lys Thr Ala Glu Arg
 141 165 170 175
 142 Ala Lys Leu Val Gln Glu Gly Tyr Arg Ile Val Gly Asn Ile Gly Asp
 143 180 185 190
 144 Gln Trp Asn Asp Leu Lys Gly Glu Asn Arg Ala Ile Arg Ser Phe Lys
 145 195 200 205

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146 Leu Pro Asn Pro Met Tyr Tyr Thr Lys
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149 <210> SEQ ID NO: 5
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151 <212> TYPE: PRT
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156 Asn Phe Asp Thr Val Pro Ala Asn Cys Lys Ala Tyr Val Glu Asp Tyr
157 20 25 30
158 Leu Ile Thr Ser Lys Gln Tyr Gln Tyr Asp Ser Lys Thr Val Asn Lys
159 35 40 45
160 Glu Ala Tyr Phe Tyr Ala Lys Gly Leu Ala Leu Lys Asn Asp Thr Ile
161 50 55 60
162 Asn Val Trp Ile Phe Asp Leu Asp Asp Thr Leu Leu Ser Ser Ile Pro
163 65 70 75 80
164 Tyr Tyr Ala Lys Tyr Gly Tyr Gly Thr Glu Asn Thr Ala Ala Gly Ala
165 85 90 95
166 Tyr Trp Ser Trp Leu Val Ser Gly Glu Thr Pro Gly Leu Pro Glu Thr
167 100 105 110
168 Leu His Leu Tyr Glu Asn Leu Leu Glu Leu Gly Ile Glu Pro Ile Ile
169 115 120 125
170 Ile Ser Asp Arg Trp Lys Lys Leu Ser Glu Ile Thr Ile Glu Asn Leu
171 130 135 140
172 Lys Ala Val Gly Val Thr Lys Trp Lys His Val Ile Leu Lys Pro Asn
173 145 150 155 160
174 Gly Lys Leu Thr Gln Val Val Tyr Lys Ser Lys Val Arg Asn Gly Leu
175 165 170 175
176 Val Arg Gln Gly Tyr Asn Ile Val Gly Ile Ile Gly Asp Gln Trp Ala
177 180 185 190
178 Asp Leu Val Glu Asp Thr Pro Gly Arg Val Phe Lys Leu Pro Asn Pro
179 195 200 205
180 Leu Tyr Tyr Val Pro Ser
181 210
183 <210> SEQ ID NO: 6
184 <211> LENGTH: 220
185 <212> TYPE: PRT
186 <213> ORGANISM: Arabidopsis thaliana
187 <400> SEQUENCE: 6
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189 1 5 10 15
190 Ser Asn Ile Ile Asn Phe Asp Thr Val Pro Ala Asn Cys Lys Ala Tyr
191 20 25 30
192 Val Glu Asp Tyr Leu Ile Thr Ser Lys Gln Tyr Gln Tyr Asp Ser Lys
193 35 40 45
194 Thr Val Asn Lys Glu Ala Tyr Phe Tyr Ala Lys Gly Leu Ala Leu Lys
195 50 55 60
196 Asn Asp Thr Val Asn Val Trp Ile Phe Asp Leu Asp Asp Thr Leu Leu

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197      65          70          75          80
198 Ser Ser Ile Pro Tyr Tyr Ala Lys Tyr Gly Tyr Gly Thr Glu Asn Thr
199           85          90          95
200 Ala Pro Gly Ala Tyr Trp Ser Trp Leu Glu Ser Gly Glu Ser Thr Pro
201           100         105         110
202 Gly Leu Pro Glu Thr Leu Tyr Leu Tyr Glu Asn Leu Leu Glu Leu Gly
203           115         120         125
204 Ile Glu Pro Ile Ile Ile Ser Asp Arg Trp Lys Lys Leu Ser Glu Val
205           130         135         140
206 Thr Val Glu Asn Leu Lys Ala Val Gly Val Thr Lys Trp Lys His Leu
207           145         150         155         160
208 Ile Leu Lys Pro Asn Gly Ser Lys Leu Thr Gln Val Val Tyr Lys Ser
209           165         170         175
210 Lys Val Arg Asn Ser Leu Val Lys Lys Gly Tyr Asn Ile Val Gly Asn
211           180         185         190
212 Ile Gly Asp Gln Trp Ala Asp Leu Val Glu Asp Thr Pro Gly Arg Val
213           195         200         205
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226 Val Glu Asp Tyr Leu Ile Thr Ser Lys Gln Tyr Gln Tyr Asp Ser Lys
227           35         40          45
228 Thr Val Cys Lys. Glu Ala Tyr Phe Tyr Ala Lys Gly Leu Ala Leu Lys
229           50         55          60
230 Asn Asp Thr Val Asn Val Trp Ile Phe Asp Leu Asp Asp Thr Leu Leu
231           65         70          75          80
232 Ser Ser Ile Pro Tyr Tyr Ala Lys Tyr Gly Tyr Gly Thr Glu Lys Thr
233           85         90          95
234 Asp Pro Gly Ala Tyr Trp Leu Trp Leu Gly Thr Gly Ala Ser Thr Pro
235           100        105         110
236 Gly Leu Pro Glu Gly Leu Tyr Leu Tyr Gln Asn Ile Ile Glu Val Gly
237           115        120         125
238 Ile Glu Pro Ile Ile Leu Ser Val Arg Trp Lys Leu Trp Lys Asn Val
239           130        135         140
240 Thr Leu Asn Leu Glu Ala Ala Gly Val Thr Tyr Trp Lys His Leu Ile
241           145        150         155         160
242 Leu Lys Pro Asn Gly Ser Asn Leu Arg Gln Val Val Tyr Lys Ser Lys
243           165        170         175
244 Val Arg Asn Lys Leu Val Lys Lys Gly Tyr Asn Ile Val Gly Asn Ile
245           180        185         190
246 Gly Asp Gln Trp Ala Asp Leu Val Glu Asp Thr Pro Gly Arg Val Phe

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/478,567

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Input Set : N:\Crf3\RULE60\09478567.raw.txt

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